

Facility Name: Norda Inc
Location: 140 Route 10, East Hanover NJ
EPA Region: Region II
Person(s) in Charge of the Facility: NJDEP - Bureau of
Environmental Evaluation
Cleanup and Responsibility Assmt.

Name of Reviewer: Robert Reich Date: 8/18/89
Revised 4/4/90

General Description of the Facility:

(For example: landfill, surface impoundment, pile, container;
types of hazardous substances; location of the facility;
contamination route of major concern; types of information
needed for rating; agency action, etc.)

Major area of concern is area where approximately
3500 drums of process waste were buried during
the 1960s. The major route of concern for
the materials buried is groundwater. An ongoing
ECRA investigation/remediation program
which has addressed most the source and contamination
of the site and is continuing at this time

Scores:

HRS $S_M = 46.90$ ($S_{gw} = 80.76$ $S_{sw} = 7.83$ $S_a = 0$)

PRO $S_M = 55.32$ ($S_{gw} = 80.76$ $S_{sw} = 11.75$ $S_a = 50.0$)

HRS COVER SHEET

* Note: this is a connected set of HRS
scoring sheets, sent on April 12, 1990.

249147



Ground Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)		Multi- plier	HRS	Max. Score	PRO
<input type="checkbox"/> 1 Observed Release	0	45	1	45	45	45
If observed release is given a score of 45, proceed to line <input type="checkbox"/> 4. If observed release is given a score of 0, proceed to line <input type="checkbox"/> 2.						
<input type="checkbox"/> 2 Route Characteristics						
Depth to Aquifer of Concern	0	1 2 3	2		6	
Net Precipitation	0	1 2 3	1		3	
Permeability of the Unsaturated Zone	0	1 2 3	1		3	
Physical State	0	1 2 3	1		3	
Total Route Characteristics Score					15	
<input type="checkbox"/> 3 Containment	0	1 2 3	1		3	
<input type="checkbox"/> 4 Waste Characteristics						
Toxicity/Persistence	0	3 6 9 12 <input type="checkbox"/> 15 18	1	15	18	15
Hazardous Waste Quantity	0	1 2 3 4 5 <input type="checkbox"/> 6 7 8	1	6	8	6
Total Waste Characteristics Score				21	28	21
<input type="checkbox"/> 5 Targets						
Ground Water Use	0	1 2 <input type="checkbox"/> 3	3	9	9	9
Distance to Nearest Well/Population Served	0	4 6 8 10	1	40	40	40
	12	16 18 20				
	24	30 32 35 <input type="checkbox"/> 40				
Total Targets Score				49	49	49
<input type="checkbox"/> 6 If line <input type="checkbox"/> 1 is 45, multiply <input type="checkbox"/> 1 x <input type="checkbox"/> 4 x <input type="checkbox"/> 5 If line <input type="checkbox"/> 1 is 0, multiply <input type="checkbox"/> 2 x <input type="checkbox"/> 3 x <input type="checkbox"/> 4 x <input type="checkbox"/> 5				46305	57.330	46305
<input type="checkbox"/> 7 Divide line <input type="checkbox"/> 6 by 57.330 and multiply by 100				Sgw = 80.76		80.76

Surface Water Route Work Sheet						
Rating Factor	Assigned Value (Circle One)	Multi- plier	HRS	Max. Score	PRO	
1 Observed Release	0 45	1	0	45	45	
If observed release is given a value of 45, proceed to line 4 . If observed release is given a value of 0, proceed to line 2 .						
2 Route Characteristics						
Facility Slope and Intervening Terrain	0 1 2 3	1	1	3		
1-yr. 24-hr. Rainfall	0 1 2 3	1	2	3		
Distance to Nearest Surface Water	0 1 2 3	2	4	8		
Physical State	0 1 2 3	1	3	3		
Total Route Characteristics Score			10	15		
3 Containment	0 1 2 3	1	3	3		
4 Waste Characteristics						
Toxicity/Persistence	0 3 6 9 12 15 18	1	15	18	15	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	6	8	6	
Total Waste Characteristics Score			21	28	21	
5 Targets						
Surface Water Use	0 1 2 3	3	6	9	6	
Distance to a Sensitive Environment	0 1 2 3	2	2	8	2	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	0	
Total Targets Score			8	55	8	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			5040	64,350	7560	
7 Divide line 6 by 64,350 and multiply by 100			S _{sw} = 7.83		11.75	

AIR ROUTE WORK SHEET						
Rating Factor	Assigned Value (Circle One)	Multi- plier	HRS	Max. Score	PRO	
1 Observed Release	0 45	1	0	45	45	
Date and Location:						
Sampling Protocol:						
If line 1 is 0, the S = 0. Enter on line 5 . If line 1 is 45, then proceed to line 2 .						
2 Waste Characteristics						
Reactivity and Incompatibility	0 1 2 3	1		3	3	
Toxicity	0 1 2 3	3		9	6	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	6	
Total Waste Characteristics Score				20	15	
3 Targets						
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	21	
Distance to Sensitive Environment	0 1 2 3	2		6	2	
Land Use	0 1 2 3	1		3	3	
Total Targets Score				39	26	
4 Multiply 1 x 2 x 3				35,100	17530	
5 Divide line 4 by 35,100 and multiply by 100 $S_a =$				0	50.0	

HRS

	s	s ²
Groundwater Route Score (S _{gw})	80.76	6522.18
Surface Water Route Score (S _{sw})	7.83	61.31
Air Route Score (S _a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		6583.49
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		81.14
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		46.90

WORKSHEET FOR COMPUTING S_M

PRO

	s	s ²
Groundwater Route Score (S _{gw})	80.76	6522.18
Surface Water Route Score (S _{sw})	11.75	138.06
Air Route Score (S _a)	50.00	2500.00
$S_{gw}^2 + S_{sw}^2 + S_a^2$		9160.24
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		95.71
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		55.32

WORKSHEET FOR COMPUTING S_M